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Suzan Burton

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E-TAILING: WHERE ARE ALL THE SHOPPERS? LESSONS FOR THE ASIA PACIFIC

Suzan Burton

Macquarie Graduate School of Management,

Macquarie University, NSW 2109 Australia

EMAIL: suzan.burton@mq.edu.au

ABSTRACT

The growth of the Internet has caused a dramatic business transformation. Traditional channels of distribution are being challenged by the Internet's ability to offer products to distant consumers, with resulting increased competition in both product range and price. However to date, use of the Internet for retail purchases lags far behind more traditional channels of distribution, and while uptake has been much higher in the United States than in other countries, Internet retailing in both the US and in the Asia Pacific is marked more by high profile failures than by successes. This study analyses reasons for the limited success of online shopping, particularly in Australia and Hong Kong, examines whether there were warning signs that Internet shopping would not take off, and considers the implications for existing or potential e-tailers in the Asia-Pacific.

WHITHER ONLINE SHOPPING?

The potential of Internet shopping has received substantial attention in both academic literature and the popular press for a number of years [3]. Statistics have shown growth in online sales, depending on the product, from 40% to 340% over one year [30]. Exhortations such as 'Catch the wave or drown' were said to be the 'advice of industry experts to retailers resisting the onslaught of the Internet' [8]. However despite its rapid growth over the past five years, online shopping has still to make a substantial impact on retail figures. Some of the best known Internet names such as Amazon have yet to make a profit, perhaps in part due to their high customer acquisition costs, which have been said to be as high as \$29 [30]. Established retailers might be expected to have lower acquisition costs, yet even experienced retailers like Barnes and Noble have made a loss on their Internet operations [10]. In Australia, successful in-store retailers such as David Jones and Harvey Norman abandoned on line retailing due to a lack of profitability [29], but subsequently re-commenced online shopping, in part due to pressure from the market to have an e-commerce strategy. High profile failures such as E-toys, Peapod and Webvan in the US, adMart in Hong Kong, and TheSpot.com in Australia have questioned the viability of the Internet shopping model. Business failures caused by the costs of selling online are not restricted to pure play e-tailers. Ag.com, a successful Australian fax and telephone business, was forced into voluntary administration in 2000 because it could not raise funds to pay for costs linked with its web site, and later sued Accenture, the consulting company who developed the site [19].

Does this lack of online retailing profitability suggest that the impact of the Internet on traditional retail outlets has been overstated, and that the existing retail strategies of 'pure play' or 'clicks and mortar' are flawed, or does it only reflect the early stage of the medium and technology

limitations? The answers have critical implications for business, yet there has been only limited research into the factors limiting the adoption of web shopping. If online sales have shown the growth levels recorded in the literature, without yet making a substantial impact on traditional stores, there may be groups of customers or particular product types which are primarily responsible for much of the growth in online sales. Research into the drivers of, and barriers to, online shopping is important to managers and researchers. By examining some of the myths which have been used to promote online shopping, and the evidence in favour and against, we may be able to obtain some reasons for the limited success of online shopping, and some advice for potential e-tailers. In this paper, we examine some of the faulty and/or overstated arguments which were used to promote online shopping, and review the evidence concerning online shopping over the past four years.

Myth 1: People have shopped by catalogue, so they will shop online, which is more efficient for the retailer

Clues to the ultimate potential of online shopping can be gained by contrasting it with other forms of in-home shopping, such as catalogue and direct response (or television) shopping. All these distribution channels share similar advantages and disadvantages and appear to appeal to similar demographics. Studies of what is important to online and catalogue shoppers have identified convenience and the ability for impulse purchases as key reasons for shoppers using both channels [6] [13] [14]. Common barriers have also been identified as reasons for not shopping by catalogue or online: a preference for seeing the product before purchase, a lack of trust in the medium, and a reluctance to wait for delivery [27] [6]. Both distribution methods have been said to experience significant problems in coping with returned goods, a problem compounded by international sales, where there may be difficulty reclaiming taxes [16] [33]. Higher income groups have been shown to be over-represented among both groups [17] [22] [5]. These similarities between the two channels suggest that the attraction of Internet shopping may be greatest in countries with an established tradition of non-store retailing.

However most of the research into Internet shopping has been conducted in the US, with an implicit assumption that other countries will follow the increasing pattern of online shopping shown by the US. However there are clear reasons to suggest that the US market may be different from other countries, and that US projections may then not apply to other markets. The penetration of catalogue and direct response shopping has been much higher in the US than in all other markets [16], particularly the Asia Pacific region, probably due to the much higher level of urbanisation in countries such as Hong Kong, Singapore and Australia. The US also offers tax advantages for

catalogue retailers who set up in low cost states, providing cost advantages for shoppers who live in higher taxed states. With a consistent tax structure, e-tailers in the Asia-Pacific area do not share these cost advantages relative to retail stores, and thus compete against local retailers with additional delivery charges, and lower brand recognition. Without a strong tradition of catalogue shopping or tax advantages, the penetration of Internet shopping was always likely to be lower outside the US.

Even within the US, it has been noted for many years that catalogue and phone shopping have never achieved a substantial proportion of retail sales, suggesting that in-home shopping has substantial limitations for many of the population [32]. Catalogue sales have been said to plummet when new retail stores are opened in strong catalogue regions [31], so the lower penetration of catalogue shopping in other countries may be partly explained by higher levels of urbanisation, with consequent higher retail penetration.

Myth 2: Use of the Internet is rapidly increasing, so people will shop on-line:

Any report on the future of Internet shopping in the later 1990s discussed rapidly increasing penetration rates for Internet use. US statistics reported rapid increases in the number of people who have shopped on line, from 37% of AOL subscribers in June 1998 to 62% in September 1999 said to have shopped online [18]. Statistics from Hong Kong and Australia revealed a very different picture, however. In the 12 months to November 1999, 43% of Australians accessed the net, but only 5% used it to order goods or services [2]. At the same time, 37% of Hong Kong households were online, but only 5% had shopped online [36]. Despite high levels of Internet use, both countries showed very low rates of shopping online. More worryingly, even analysis of early adopters showed very low repurchase rates: in 1999, more than half of those who had shopped online in Australia had bought on only one or two occasions [1].

In every study of Internet use, people were shown to be primarily using the Internet for information search and communication. The most common use of the Internet in communications is for transmission of electronic messages or e-mail, particularly in the workplace, with 55-84% of workers in different countries reporting using the Internet every day or several times a week [26]. Behind the statistics of Internet use was a pattern of trial shopping, but with limited repeat purchases, except for a small minority. This is in line with studies of web usage which have shown that increased experience may not influence behaviour in a linear fashion, with moderate users often enjoying web use less than less experienced users [24].

Myth 3: Teenagers are online all the time. Given time, they will shop online

It is often said that today's teenagers will be much more likely than today's adults to purchase online, but there should have been a warning from early US statistics which showed that despite high levels of Internet use, there were

very low levels of online shopping by teenagers (Connelly 1999). The limited use of online shopping may be due to teenagers' lack of access to credit, and it is then possible that today's computer savvy teenagers may switch to online shopping when they have their own credit cards. However these same teenagers are developing shopping habits based on bricks and mortar stores, and socialising patterns which are often based around retail malls, just as their parents did, so their shopping patterns in adulthood may not differ significantly from their parents.

Myth 4: It just needs time!

In attempting to understand the diffusion of an innovation such as online shopping, the behaviour of early adopters can be used to shed light on subsequent adoption patterns [21]. So, if we consider the Internet as an innovation, the study of early adopters can perhaps suggest something about the long term potential of the channel. However studies of early adopters in the Asia-Pacific were showing low rates of repeat behaviour. Over half of those who had shopped online had bought on only one or two occasions [1]. Another study of Hong Kong, Singapore and Australian managers with high rates of Internet use had found low adoption of Internet shopping, and low rates of repurchase, with the exception of a small percentage of individuals [7]. One of the best known Internet retailers, Amazon, recently posted its 17th consecutive quarterly loss. More worryingly, Amazon sales forecasts at the same time were cut from the previous estimate of a 20-30% increase to an 11-16% increase. Over the same quarter, sales of the company's main business of books, music and videos rose only 1% over the previous quarter, suggesting that the market is relatively mature in these areas, thus decreasing the probability that sales growth in these areas could propel Amazon to profitability [25].

Myth 5: It's more efficient on-line

One of the early attractions of the Internet was said to be lower distribution costs, due to the lack of a store presence. It has quickly become apparent that building awareness online is very expensive, and that IT support costs and advertising rates on-line to gain awareness are equal to, or higher than, rental costs to achieve a store presence and passing physical trade. The cost of acquiring customers has been a major problem for start-up internet retailers. E-toys, the failed online toy retailer, paid \$3 million to become an 'anchor tenant' on AOL, and paid 25% of each sales dollar to other net players who steered customers to eToys [30]. Added to the costs for e-tailers have been the substantial IT cost, which even in 1999, were as high as \$US75,000, and were estimated by the Gartner group to rise to \$US1.5 million by 2001.

The high costs of building awareness for a start-up should provide a substantial advantage to the so-called 'clicks and mortar' retailers, with a known brand and a web presence, such as Barnes & Noble in the US, David Jones in Australia, and Giordano in Asia. However the established retailers face other problems when they attempt to sell online. Most reports of what people buy online have been dominated by commodity type goods such as books and

cds, where price comparisons are easy, and barriers to switching are low. As a consequence, pricing online has been highly competitive, and margins very low, making it difficult or impossible for e-tailers to cover delivery costs, let alone make a contribution to the very high fixed costs of setting up and maintaining a web presence. In such a world, the only source of sustainable competitive advantage is cost leadership, and a company which attempts to compete in this market without cost leadership is likely to suffer limited business if it doesn't match prices, and low or non-existent profits if it does match prices.

Myth 6: Shopping online isn't very different

The idea that consumers will switch a substantial proportion of their purchases to online channels ignores knowledge about consumer shopping behaviour. Except for products which can be downloaded online, Internet shopping requires exposure to a product, choice, typically without trial, and a wait, typically several days minimum, to receive the product. However in-store shoppers typically make a large percentage of their purchases on impulse, after being exposed to them after walking through the store [35]. Internet shopping cannot expose shoppers to anything like the same number of products or services. It lacks the ability to pick up, touch, smell, and try the product. While these are not a disadvantage for repeat purchases, it limits the potential to expose the consumer to many additional products which may be bought during a trip for routine stock replenishment.

Asia-Pacific cities such as Hong Kong and Singapore, with highly concentrated populations, pose particular problems for online shopping. Hong Kong residents, in particular, shop more often for groceries than any other country in the world, probably due to the city's strong tradition of wet markets. In such a retail market, switching consumers to large grocery orders would be difficult, yet frequent small orders are expensive for the e-tailer in picking and delivery. Start up grocery retailers such as AdMart in Hong Kong faced the dilemma that the type of order which was most profitable for the retailer (a large, occasional order) was inconsistent with existent shopping habits. Amway Australia faced a similar problem in coping with small online orders. (AdMart, like US online grocery seller WebVan, was unable to make a profit and closed in December 2000.) When Amway launched its web site, it found that the average order size went down, and distribution costs rose by more than 20% as customers used the web to place small orders [23].

Myth 7: Logistics can be solved with a good business plan

The failed US retailer, E-toys, is a salutary lesson of a well resourced, well planned enterprise, which achieved high awareness and trial, yet which still failed to make money. Some of the failure of E-toys and other retailers can be traced to logistic problems, such as the requirement to carry large amounts of inventory, the high seasonality of products such as toys, clothes and gifts, difficulty in selling off excess unsold inventory, and the high cost of returns. Delivery problems are exacerbated in highly

urbanised cities such as Hong Kong and Singapore, where a large percentage of the population (particularly the target population of young professionals) live in security apartment blocks and/or work long hours, so delivering an order, except after hours, is difficult. Innovative distribution systems, such as the Australian partnership between Wishlist.com.au and petrol stations to provide delivery pick up and returns have gone part of the way to address this issue. However the delivery point adds another intermediary to the delivery chain, resulting in higher costs.

Myth 8: Customers prefer online shopping

While there will always be customers for whom online shopping offers a benefit, the evidence is that the bulk of customers do not see a substantial benefit in shopping online, given perceived security risks, delivery costs, and the inability to touch and try the product before purchase. In highly urbanised societies such as Hong Kong and Singapore, access to retail shops is close and convenient. Access to retail stores is simplified by extended opening hours, and shopping is an established recreational activity. In this environment, the advantage of online sites such as Giordano.com.hk, with problematic delivery caused by long working hours and security apartment buildings, is not clear, when the nearest retail outlet is likely to be close, and products can be tried before purchase. In particular, there is evidence that for some customers, browsing in-store may be more rewarding than the actual acquisition of products [5]. Customers who enjoy browsing in-store will thus be exposed to substantially greater numbers of products, and are likely to provide a significant amount of in-store sales. There is no evidence that browsing online creates the same hedonic response. Online browsers will also be exposed for a much lower number of products in almost any directed or undirected browsing session, creating a lower probability of buying.

One of the arguments for online shopping is that it is faster, more convenient, and thus more attractive for buyers. While this model of shopping as a search cost may be true for some products and for some consumers, the paradigm of in-store shopping as a cost ignores the complex nature of many retail exchanges. The situational nature of many purchases has been demonstrated by a range of authors (see for example [20] [12]). A number of situational factors will also limit sales over the Net. Net consumers are not exposed to in-store triggers or to in-store personal selling techniques. Many items, such as fashion, need to be tried on before purchase and are consequently generally less suitable to sell on the Web. (Catalogue clothing tends to be loose fitting and make extensive use of features such as elastic waists as a response to this problem.) Hardware constraints still make it difficult to assess colours or to rapidly scan online offerings, and the enforced delay in delivery for products ordered over the Net will be a disadvantage for consumers who want immediate use of a product.

Perhaps a greater limitation to the potential of the Web to effect retail sales is that for many consumers, the search process can be enjoyable in itself, whether or not a

purchase is ultimately made, akin to Thaler's concept of transaction utility [34]. While a purchase may provide acquisition utility for both web and in-store purchases (though delayed by the delivery lag for web purchases), shopping itself may provide transaction utility for groups of consumers. Consumers with stronger feminine identities have been shown to manifest greater involvement and enjoyment of shopping [15]. There has been little research into enjoyment of web shopping, but available data would suggest that for consumers who enjoy shopping, online shopping is not a substitute. Given the limited sensory exposure of the web, competing content and the technological constraints which limit rapid browsing, it is likely that online shopping has less potential to create impulse buying, which has been shown to be strongly associated with physical exposure to a product, often when no purchase was intended [28].

DOES ONLINE SHOPPING HAVE A FUTURE?

There will always be a demand for Internet shopping, from people who value its convenience and for its ability to supply unusual items to distant markets. The internet has particular advantages for search goods, such as books and cds, for repeat purchases of experience goods such as pre-trialled clothing, pharmacy items, and for purchases with high distribution efficiencies online, such as share transactions. In contrast, however the Internet has major limitations for stimulating impulse buys, for goods requiring trial, for risk averse consumers, for price conscious consumers, and for consumers seeking the shopping experience.

The strategic problem for the online retailer, however, is whether the demand for Internet shopping will be able to be satisfied in a manner which is economically sustainable. This analysis suggests that the medium itself may have limited attraction for many consumers, except under special conditions, such as ordering an unusual book. However delivering unusual items is not a large market. If the Internet has limited benefits for supplying the relatively standard items which constitute the bulk of retail sales, it is unlikely that the organisation will be able to generate sufficient demand and extract an adequate margin to cover the set-up and maintenance costs of an online system. Logistic issues such as seasonality, distribution costs, and disposing of excess inventory pose further problems. While children and teenagers have high levels of on-line activity, their established shopping habits do not suggest that they will be any less addicted than their parents to bricks and mortar outlets.

Can a bricks and mortar retailer succeed with an e-commerce strategy?

The preceding analysis suggests that Internet retailing will continue to be a high risk analysis, even for established retailers. For intangibles purchases, however, the ability to see goods before purchase does not distinguish Internet channels from physical retail outlets. For example, banking services are as visible on the Internet as in a branch. Travel services can be more visible on the Internet than in a travel agent's office because of the ability to

access a range of visual images. In other words, there is little difference in trialability of these services across channels. Similarly, delay in delivery is not a problem for financial services or travel bookings delivered through the Internet compared with delivery through conventional channels. It is also doubtful that concerns about enjoyment will significantly differentiate Internet visits to the bank or travel agent from more conventional ways of obtaining these services. For these reasons, therefore, goods and services that can be transacted and delivered via the Internet can be expected to be more readily adopted than tangible goods, and goods and services that must be delivered by different channels. The critical strategy issue for these organisations, however, is whether they can generate sufficient revenue from Internet operations to justify the huge start-up and ongoing investment in online selling.

For purchases of tangible goods, the Internet offers other substantial advantages; the ability to provide information on demand, to compare options and establish availability even if the final decision is made in-store. The Internet can then be a powerful support tool for the bricks and mortar retailer, providing detailed information to a level of detail that the in-store shop assistant can rarely hope to match. A good example of this is the Australian sports retailer, Rebel Sport, who have chosen not to develop online selling, but instead use their web site in a 'pull' strategy, to drive traffic to the stores, by the provision of sporting information. Using a pull strategy can allow a store to estimate demand for online sales by measuring traffic to the web site, using strategies such as intermittent online vouchers to attract business to the web site, and to estimate the price sensitivity of potential web shoppers.

CONCLUSION

Online shopping is undoubtedly here to stay, and will provide an alternative channel for some retailers and consumers, particularly for those who are selling or who seek rare or unusual products. However substantial barriers to the adoption of online shopping persist. For retailers, the most critical barrier is strategic, in developing profitable margins and an economic mass of customers. Fundamentally, however, this barrier is based on overcoming established consumer preferences for in-store shopping. While a minority group of consumers will continue to be heavy users of online shopping and a majority of customers might use it intermittently, building sufficient mass of customers to ensure economic returns is likely to continue to provide a challenge to both pure play e-tailers and established retailers who wish to develop an online presence.

In 1996, marketing scholar George Day suggested four traps for businesses in developing interactive marketing; deferring participation, picking the wrong technology, unwillingness to commit, and lack of persistence [11]. However following this advice in the highly uncertain world of Internet marketing seems more likely to lead managers into investing and persisting in risky markets. More appropriate advice to managers might be to understand their customer behaviour, and to thoroughly

assess the likely risks and returns before investing large sums which could provide a greater return if spent on some other area of marketing activity.

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